

Title (en)

DEVICE FOR DETECTING RECIRCULATION DURING AN EXTRACORPOREAL BLOOD TREATMENT

Title (de)

VORRICHTUNG ZUR ERKENNUNG DER REZIRKULATION WÄHREND EINER EXTRAKORPORALEN BLUTBEHANDLUNG

Title (fr)

DISPOSITIF PERMETTANT D'IDENTIFIER UNE RECIRCULATION PENDANT UN TRAITEMENT SANGUIN EXTRACORPOREL

Publication

EP 2897669 A1 20150729 (DE)

Application

EP 13765643 A 20130910

Priority

- DE 102012018628 A 20120921
- US 201261703845 P 20120921
- EP 2013002718 W 20130910

Abstract (en)

[origin: US2014083943A1] A device and method for detecting recirculation for an extracorporeal blood treatment apparatus and an apparatus with a device for detecting recirculation are based on targeted haemodilution by administration of a substitute bolus, causing a pressure change in venous and arterial branches of the extracorporeal circuit due to a viscosity change of flowing fluid. Recirculation is detected based on detection of the pressure change. The device includes a control unit cooperating with a device for conveying blood and a device for supplying substitute. The control unit provides an operating mode for detecting recirculation, in which blood flow rate is reduced during administration of a substitute bolus. With simultaneous substitute bolus administration and reduction of blood flow rate, the composition of fluid flow is optimised for detection of recirculation, so that fairly large pressure changes result in venous and arterial branches, thereby improving sensitivity and reliability of the measurement method.

IPC 8 full level

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CPC (source: CN EP US)

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Citation (search report)

See references of WO 2014044365A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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BA ME

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US 2014083943 A1 20140327; **US 9248226 B2 20160202**; AU 2013320645 A1 20150430; AU 2013320645 B2 20180719; CN 104755114 A 20150701; CN 104755114 B 20170620; DE 102012018628 A1 20140327; EP 2897669 A1 20150729; EP 2897669 B1 20190102; JP 2015529116 A 20151005; JP 6283363 B2 20180221; KR 102220982 B1 20210226; KR 20150058239 A 20150528; US 2016220747 A1 20160804; US 9616164 B2 20170411; WO 2014044365 A1 20140327

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